



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,650	08/14/2002	Jens Barrenschenn	12816-046US1	3114

7590 05/05/2005

Fish & Richardson  
225 Franklin Street  
Boston, MA 02110-2804

EXAMINER

BADERMAN, SCOTT T

ART UNIT	PAPER NUMBER
----------	--------------

2113

DATE MAILED: 05/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/089,650

Applicant(s)

BARRENSCHEEN ET AL.

Examiner

Scott T. Baderman

Art Unit

2113

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12 and 14-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12 and 14-17 is/are allowed.
- 6) ☒ Claim(s) 18-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION*****Priority***

1. Receipt is acknowledged of a certified copy of the European application referred to in the oath or declaration or in an application data sheet. If this copy is being filed to obtain the benefits of the foreign filing date under 35 U.S.C. 119(a)-(d), applicant should also file a claim for such priority as required by 35 U.S.C. 119(b). If the application being examined is an original application filed under 35 U.S.C. 111(a) (other than a design application) on or after November 29, 2000, the claim for priority must be presented during the pendency of the application, and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior foreign application. See 37 CFR 1.55(a)(1)(i). If the application being examined has entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the claim for priority must be made during the pendency of the application and within the time limit set forth in the PCT and Regulations of the PCT. See 37 CFR 1.55(a)(1)(ii). Any claim for priority under 35 U.S.C. 119(a)-(d) or (f) or 365(a) or (b) not presented within the time period set forth in 37 CFR 1.55(a)(1) is considered to have been waived. If a claim for foreign priority is presented after the time period set forth in 37 CFR 1.55(a)(1), the claim may be accepted if the claim properly identifies the prior foreign application and is accompanied by a grantable petition to accept an unintentionally delayed claim for priority. See 37 CFR 1.55(c).

The earliest effective filing date given for the instant application is April 1, 2002. This is because the original declaration **does not claim priority to the German application.**

### *Specification*

2. The disclosure is objected to because of the following informalities:

Pages 7, 8, 14 and 15 include sentences that are not complete. That is, the specification appears to be a copy of the specification in a related PCT document, wherein amendments were made to the specification in the PCT document. However, the amendments made in the specification of the PCT document do not appear in the specification of the instant application. It appears that the Applicant contains a different copy of the specification than that of the one on record (the specification on record is clear as to where the deficiencies are). If this is the case, it is requested that the Applicant submit a clean copy of the specification. Appropriate correction is required.

### *Claim Objections*

3. Claim 12 is objected to because of the following informalities: Because of the amendment, there are now many antecedent basis issues (e.g., lines 5-6: the first transceiver receiver). It is suggested that by inserting the amendment at the end of the claim, these antecedent basis issues will be resolved. Also in line 10, it is not clear as to which "transceiver receiver" is being referred to.

Art Unit: 2113

4. Claim 17 is objected to because of the following informalities: It is dependent from canceled claim 13.

5. Claim 20 is objected to because of the following informalities: In line 2 "the" (first occurrence) needs to be deleted.

***Allowable Subject Matter***

6. Claims 12, 14-17 are allowed (pending the objections above).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 18-21 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neuhaus et al. (5,903,565).

As in claim 18, Neuhaus discloses a protective circuit for an access arbitrated bus system network that comprises a fault recognition device to recognize a fault state in a network section in the bus system network by monitoring voltage levels on bus lines in the bus system network (Abstract, column 1: lines 13-20, column 5: lines 20-25), and a switching device to isolate the

Art Unit: 2113

network section from the bus system network by switching bus lines when a fault state has been recognized in the network section (Abstract, column 1: lines 44-47, column 4: line 62 – column 5: line 3). However, Neuhaus does not clearly disclose wherein the switching device includes a plurality of switches connected in parallel, wherein the switches comprise two reverse connected series MOSFET transistors.

It would have been obvious to a person skilled in the art at the time the invention was made to include wherein the switching device includes a plurality of switches connected in parallel, wherein the switches comprise two reverse connected series MOSFET transistors into the system taught by Neuhaus above. This would have been obvious because Neuhaus clearly teaches that the switching function (enable and disable) occurs as a function of the bus driver and bus receiver (column 4: lines 55-61), and further teaches that the invention is not limited to the technology of bus drivers and bus receivers according to the CAN standard (column 2: lines 39-43). Based on these teachings, it would have been suggested to a person skilled in the art that the switching function can be done by an array of different configurations. Being that it is well known to have a switch that consists of two reverse connected series MOSFET transistors (for example, see JP 61224726 A), a person skilled in the art would have been led to incorporate this configuration into the system taught by Neuhaus to perform the switching function.

As in claim 19, Neuhaus discloses a first fault state detection circuit to detect a fault state in a first network section (Figure 2, element 71), a second fault state detection circuit to detect a fault state in a second network section (Figure 2, element 72), and a fault recognition logic circuit connected to the first and the second fault state detection circuits which outputs a control

Art Unit: 2113

signal to the switching device to isolate the first and the second network sections when the first or the second fault state detection circuits detect a fault state (Figure 2, column 4: line 55 - column 6: line 15).

As in claim 20, Neuhaus discloses a fault bus to connect the fault recognition logic circuit to control nodes in the bus system network wherein the fault bus provides information data to the control nodes indicating that the network section recognized as faulty has been isolated from the bus system network (i.e., a logic 0 represents that the bus system has been isolated) (column 4: lines 55-61, column 5: line 55 – column 6: line 9, column 8: lines 24-34).

As in claim 21, Neuhaus discloses wherein the access arbitrated bus system is a Controller Area Network (CAN) bus system (column 1: lines 13-37).

As in claim 23, Neuhaus discloses wherein the access arbitrated bus system is a Carrier Sense multiple Access (CSMA) bus system (Abstract).

As in claim 24, Neuhaus discloses wherein the fault recognition device recognizes as fault states, short circuits between the bus lines in a network section, short circuits between the bus lines in the network section and ground, and short circuits between the bus lines in the network section and supply voltage (i.e., the error detector reads in voltage levels and determines whether recognizable errors are present in the bus system. It is interpreted that voltage levels will indicate whether there is a short circuit or not) (column 5: line 20 – column 6: line 6).

As in claim 25, Neuhaus discloses wherein the fault recognition device recognizes the termination of a fault state in a network section and actuates the isolation device to remove the isolation between the network sections and the overall bus system (i.e., the bus system is switched on/enabled) (Abstract, column 1: lines 13-20 and 44-47, column 4: line 55 – column 5: line 3).

9. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Neuhaus et al. in view of Applicant's admitted prior art (hereinafter "AAPA").

As in claim 22, Neuhaus discloses wherein the access arbitrated bus system is a Carrier Sense Multiple Access (CSMA) bus system (Abstract) or a Controller Area Network (CAN) bus system (column 1: lines 13-37). However, Neuhaus does not clearly disclose wherein the access arbitrated bus system is a J 1850 bus system. AAPA discloses that examples of access arbitrated bus systems are a Carrier Sense multiple Access (CSMA) bus system, a Controller Area Network (CAN) bus system or a J 1850 bus system (p. 1).

It would have been obvious because to a person skilled in the art at the time the invention was made to include the circuit taught by Neuhaus above into a J 1850 bus system. This would have been obvious because AAPA teaches that the J 1850 bus system, like the Carrier Sense multiple Access (CSMA) bus system and the Controller Area Network (CAN) bus system, is also an access arbitrated bus system.



***Response to Arguments***

10. Applicant's arguments with respect to claims 18-25 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott T. Baderman whose telephone number is (571) 272-3644. The examiner can normally be reached on Monday-Friday, 6:45 AM-4:15 PM, first Fridays off.

Art Unit: 2113

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



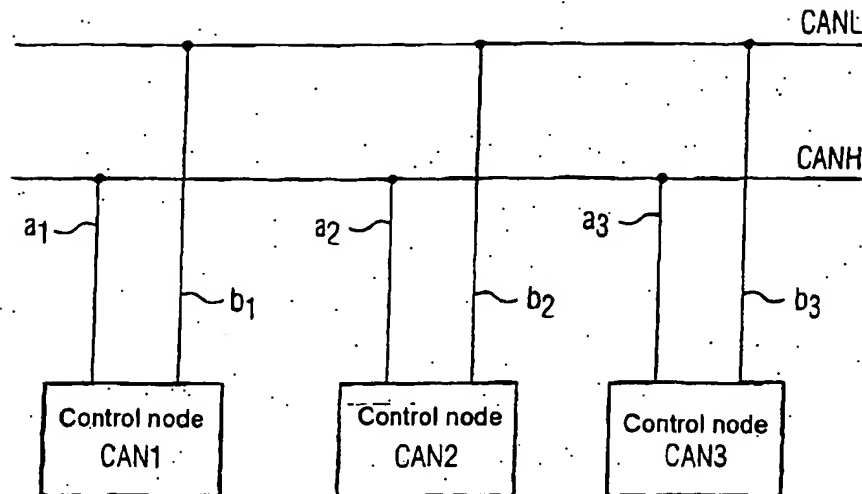
Scott T Baderman  
Primary Examiner  
Art Unit 2113

STB



Approved  
AR

FIG 1



PRIOR ART